

## SELECTED FINANCIAL AND OPERATING INFORMATION

	Three months ended September 30, (unaudited)		Nine months ended September 30, (unaudited)		Year ended December 31, 2019
(thousands of dollars except per share data, numbers of shares and kilometres of seismic data)	2020	2019	2020	2019	2019
Revenue					
Data library sales	1,829	2,460	5,869	18,354	23,635
Other revenue	76	127	257	437	520
Total revenue	1,905	2,587	6,126	18,791	24,155
Amortization of seismic data library	2,489	3,557	8,855	10,700	14,200
Net loss	(1,937)	(2,861)	(7,073)	(2,652)	(3,411)
Per share basic and diluted	(0.04)	(0.05)	(0.13)	(0.05)	(0.06)
Cash provided by (used in) operating activities	603	(1,609)	3,062	7,478	8,605
Per share basic and diluted	0.01	(0.03)	0.06	0.14	0.16
Cash EBITDA <sup>(a)</sup>	1,222	1,325	3,290	13,678	17,557
Per share – basic and diluted <sup>(a)</sup>	0.02	0.02	0.06	0.25	0.33
Shareholder free cash flow <sup>(a)</sup>	861	1,072	2,395	10,624	13,605
Per share – basic and diluted <sup>(a)</sup>	0.02	0.02	0.04	0.20	0.25
Capital expenditures					
Seismic data purchases, digitization and related costs	96	–	287	61,029	61,029
Property and equipment	–	–	7	398	439
Total capital expenditures	96	–	294	61,427	61,468
Weighted average shares outstanding					
Basic and diluted	53,793,317	53,793,317	53,793,317	53,793,317	53,793,317
Shares outstanding at period-end			53,793,317	53,793,317	53,793,317
Seismic library					
2D in kilometres			829,207	829,207	829,207
3D in square kilometres			65,310	65,310	65,310

## FINANCIAL POSITION AND RATIOS

(thousands of dollars except ratios)	September 30, 2020	September 30, 2019	December 31, 2019
Working capital	2,007	579	596
Working capital ratio	1.6:1	1.1:1	1.1:1
Cash and cash equivalents	282	814	1,356
Total assets	56,901	70,994	69,807
Long-term debt	28,417	31,854	31,511
Trailing 12-month (TTM) cash EBITDA <sup>(b)</sup>	7,169	16,887	17,557
Shareholders' equity	24,909	32,674	31,973
Long-term debt to TTM cash EBITDA ratio	3.96	1.89	1.79
Long-term debt to equity ratio	1.14	0.97	0.99

(a) This non-GAAP financial measure is defined, calculated and reconciled to the nearest GAAP financial measures in the Management's Discussion and Analysis.

(b) TTM cash EBITDA is defined as the sum of the trailing 12 months' cash EBITDA generated over the previous 12 months and is used to provide a comparable annualized measure.

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2020

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The following Management's Discussion and Analysis (MD&A) of the financial condition and results of operations of Pulse Seismic Inc. ("Pulse" or the "Company") for the three and nine months ended September 30, 2020 was prepared taking into consideration information available to November 10, 2020 and should be read with the unaudited condensed consolidated interim financial statements and related notes for the three and nine months ended September 30, 2020. This MD&A is supplemental to the MD&A, audited consolidated financial statements and related notes for the year ended December 31, 2019.

The unaudited condensed consolidated interim financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) with comparative figures for the prior year's periods. The unaudited condensed consolidated interim financial statements and the MD&A were reviewed by Pulse's Audit and Risk Committee and approved by Pulse's Board of Directors. All financial information is reported in Canadian dollars. This MD&A discusses matters which Pulse's management considers material. Management determines whether information is material based on whether it believes a reasonable investor's decision whether or not to buy, sell or hold shares in the Company would likely be influenced or changed if the information were omitted or misstated. Readers should also read the cautionary statement in "Forward-Looking Information".

## OVERVIEW

### ABOUT PULSE

Pulse is a market leader in the acquisition, marketing and licensing of two-dimensional (2D) and three-dimensional (3D) seismic data for the energy sector in Western Canada. Seismic data is used by oil and natural gas exploration and development companies to identify portions of geological formations that have the potential to hold hydrocarbons. Seismic data is used in conjunction with well logging data, well core comparisons, geological mapping and surface outcrops to create a detailed map of the Earth's subsurface at various depths.

Pulse owns the largest licensable seismic data library in Canada, currently consisting of approximately 65,310 net square kilometres of 3D seismic and 829,207 net kilometres of 2D seismic. The library extensively covers the Western Canada Sedimentary Basin (WCSB), where most of Canada's oil and natural gas exploration and development occur.

Pulse calculates net kilometres of 2D data and net square kilometres of 3D data by multiplying the number of kilometres of seismic data in each 2D line and the number of square kilometres of seismic data in each individual 3D seismic dataset by Pulse's percentage of ownership in each.

### MISSION AND STRATEGY

Pulse is a pure-play seismic data library company focused on the acquisition, marketing and licensing of seismic data to the western Canadian oil and natural gas sector. The Company's business model is designed to generate a growing stream of cash flow by repeatedly licensing the data in its seismic data library to oil and natural gas companies. Pulse's strategy is to pursue growth opportunities that meet its financial and technical criteria while maintaining a low cost structure.

## COVID 19-IMPACT ON THE COMPANY'S OPERATIONS AND RISKS

In March 2020, the COVID-19 outbreak was recognized as a pandemic. In addition, global commodity prices declined significantly due to disputes between major oil-producing countries, combined with the pandemic's impact. Governments worldwide, including those in Canada, enacted emergency measures to combat the spread of the virus. These measures included travel bans, quarantine periods, shutdowns of numerous businesses and economic sectors, and social distancing, causing material disruption to businesses globally, resulting in a severe economic slowdown. Governments and central banks reacted with significant monetary and fiscal interventions designed to stabilize economic conditions; the longer-term success of these interventions, however, is not currently determinable. In the third quarter of 2020, the Company benefited from the Canada Emergency Wage Subsidy in the amount of \$135,000, bringing the total benefit to \$357,000 in 2020. All amounts were received by September 30, 2020.

The current challenging economic climate may continue to have significant adverse impacts on the Company including, but not limited to:

- Material declines in revenue and cash flows as the Company's customers, which are concentrated in the oil and natural gas industry, further cut capital budgets and reduce field activities;
- Declines in revenue that could, in turn, result in an impairment charge against the Company's seismic data library assets;
- Declines in revenue that could make the Company unable to comply with covenants in its syndicated credit facility. Based on management's forecasts, which have been updated to reflect the current market conditions caused by COVID-19 and the decline in commodity prices, the Company expects to remain in compliance with its syndicated credit facility covenants. As certain financial metrics are expected to be near the covenant thresholds, further market weakness and an extended impact from COVID-19 could change management's forecasts, which could in turn affect the Company's future covenant compliance; and
- Non-performance by the Company's customers, in turn resulting in non-payment of accounts receivable and customer defaults.

Although the economies of Alberta and B.C. slowly re-opened during the spring/summer and government authorities in both provinces are currently attempting to avoid reimposing greater restrictions, the situation remains dynamic and the ultimate duration and magnitude of the economic impact and financial effects on the Company cannot be determined. Estimates and judgements made by management in the preparation of the financial statements are difficult and subject to a higher degree of measurement uncertainty during this volatile period.

Management and the Board of Directors have taken cost-cutting measures in response to low sales revenue and the expectations that sales could remain low. Pulse has implemented salary reductions ranging from 7.5 percent to 20 percent for all of its employees. Director's fees for the chair of the Board of Directors have been reduced by 50 percent and all other independent directors' fees have been reduced by 40 percent. All administrative and operating expenses and capital spending plans have been evaluated and reduced where appropriate. The Company also applied and received the Canada Emergency Wage Subsidy for its 16 employees.

Pulse remains committed to the health and safety of its employees. In response to the public health measures associated with the pandemic, Pulse implemented its disaster recovery plan and the downtown office staff began working remotely on March 13, 2020. On July 6, 2020 a small number of staff returned to work in the downtown office, with strict policies and procedures for the health and safety of these employees. In addition, the Company has a small group working at its warehouse facility. The guidance of health authorities continues to be closely monitored and Pulse intends to have approximately one-third of its 16 staff continue to work remotely for the foreseeable future. Pulse's business is supplying licences to a digitally-based product, seismic data and, as a result, the combination of staff working in the office and remotely allows for timely responses to customers' needs. The Company's top priorities continue to be the safety of its employees, preserving cash and protecting the balance sheet while weathering these uncertain and unprecedented times.

## CORPORATE UPDATE

At September 30, 2020 the Company was in compliance with all covenants related to its syndicated credit facility. In January 2019 Pulse borrowed a total of \$38.0 million to partially fund the acquisition of Seitel Canada Ltd. (Seitel). This indebtedness included approximately \$23.0 million in senior debt from its syndicated credit facility, \$10.0 million in subordinated debt and an additional potential sales-based deferred payment of \$5.0 million due to the vendor of Seitel. The acquisition more than doubled the size of Pulse's seismic data library, which the Company believes has doubled the opportunity set for future sales. At September 30, 2020 the balance owing on these credit facilities was \$28.7 million, of which \$18.7 million was due on the Company's senior credit facility and \$10.0 million was subordinated debt. The sales-based deferred payment was fully satisfied by mid-2019.

With uncertainty continuing as to the length and severity of the oil and natural gas industry downturn, in June 2020 Pulse negotiated with the lead bank of its syndicated credit facility an amendment to its financial covenants to ensure additional flexibility in future quarters. Changes are disclosed in the liquidity, capital resources and capital requirements section.

## KEY PERFORMANCE INDICATORS

The key performance indicators used by Pulse's management to analyze business results are seismic data library sales, net earnings, cash generated by operating activities, cash EBITDA and shareholder free cash flow. The definitions, calculations and reconciliations of cash EBITDA and shareholder free cash flow to the nearest GAAP financial measures are provided in "Non-GAAP Financial Measures and Reconciliations".

Results for the key performance indicators for the three and nine months ended September 30, 2020, with comparative figures for 2019, are set out in the following table:

(thousands of dollars except per share data)	Three months ended September 30,			Nine months ended September 30,		
	2020	2019	Variance	2020	2019	Variance
Data library sales	<b>1,829</b>	2,460	(631)	<b>5,869</b>	18,354	(12,485)
Other revenue	<b>76</b>	127	(51)	<b>257</b>	437	(180)
Total seismic revenue	<b>1,905</b>	2,587	(682)	<b>6,126</b>	18,791	(12,665)
Net loss	<b>(1,937)</b>	(2,861)	924	<b>(7,073)</b>	(2,652)	(4,421)
Per share basic and diluted	<b>(0.04)</b>	(0.05)	0.01	<b>(0.13)</b>	(0.05)	(0.08)
Cash generated by operating activities	<b>603</b>	(1,609)	2,212	<b>3,062</b>	7,478	(4,416)
Per share basic and diluted	<b>0.01</b>	(0.03)	0.04	<b>0.06</b>	0.14	(0.08)
Cash EBITDA	<b>1,222</b>	1,325	(103)	<b>3,290</b>	13,678	(10,388)
Per share basic and diluted	<b>0.02</b>	0.02	(0.00)	<b>0.06</b>	0.25	(0.19)
Shareholder free cash flow	<b>861</b>	1,072	(211)	<b>2,395</b>	10,624	(8,229)
Per share basic and diluted	<b>0.02</b>	0.02	0.00	<b>0.04</b>	0.20	(0.16)

Since the beginning of 2020 the Company has experienced low data library sales, which continued in the third quarter. Quarterly sales have fluctuated greatly since the end of 2014, due to the reduced capital spending in the energy-producing sector. Given the approximate doubling of licensable seismic data in the library since the major acquisition of Seitel in the first quarter of 2019, by comparison to prior years, data sales declined further in the first, second and third quarters of 2020. The COVID-19 pandemic and the collapse of commodity prices in the first quarter caused Pulse's customers to further reduce capital expenditures in Canada. For the three months ended September 30, 2020, Pulse generated \$1.9 million of revenue compared to \$2.6 million for the same period in 2019. The 2020 third quarter's revenue included \$1.8 million in data library sales from two transaction-based deals.

The decrease in data library sales during the three and nine months ended September 30, 2020 from the same periods of 2019 is the main factor contributing to the period-over-period decrease in the Company's key performance metrics of cash EBITDA and shareholder free cash flow.

## SEISMIC REVENUE FLUCTUATIONS

Revenue fluctuations are a normal part of the seismic data library business, and data library sales can vary significantly year-over-year depending on a variety of factors.

Traditional data library sales can occur at any time. This is due to the nearly continual changes in oil and natural gas industry conditions, sudden or increased demand for seismic data covering a specific area or play, and the timing of public offerings of petroleum and natural gas rights (land sales).

Transaction-based sales can also occur at any time. This is due to corporate merger-and-acquisition, joint venture and asset disposition activity involving Pulse's customers, which is unpredictable.

## OUTLOOK

The current extreme economic uncertainty renders it difficult for Pulse to issue a specific outlook concerning industry and market conditions over the next 12 months. The plunge in domestic Canadian crude oil prices and further reductions to oil and natural gas producers' capital expenditures make it very likely that industry activity will be extremely low over the next several quarters. Accordingly, Pulse expects low traditional seismic data library sales. Transaction-based sales, however, occur as a result of industry merger and acquisition and asset sales and could happen at any time.

Having spent the past five years reducing controllable costs, maximizing efficiencies, maintaining a strong balance sheet and optimizing its access to credit, Pulse is well-prepared to weather an extended period of weak sales. As demonstrated in the first three quarters of 2020, the Company can generate positive shareholder free cash flow with sales of \$5.9 million. Pulse will continue to seek further cost reductions where possible, without impairing the Company's ability to serve its clients, conduct sales and act on attractive opportunities. The seismic library's data does not deteriorate or expire and incurs minimal maintenance costs.

## DISCUSSION OF OPERATING RESULTS

### SUMMARY FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2020

#### LOSS BEFORE INCOME TAXES

For the three months ended September 30, 2020, the Company incurred a loss before income taxes of \$2.0 million (\$0.04 per share basic and diluted) compared to a loss before income taxes of \$3.2 million (\$0.06 per share basic and diluted) for the comparable period of 2019.

For the nine months ended September 30, 2020, the Company incurred a loss before income taxes of \$7.6 million (\$0.14 per share basic and diluted) compared to a loss before income taxes of \$1.8 million (\$0.03 per share basic and diluted) for the comparable period of 2019.

#### DATA LIBRARY SALES REVENUE

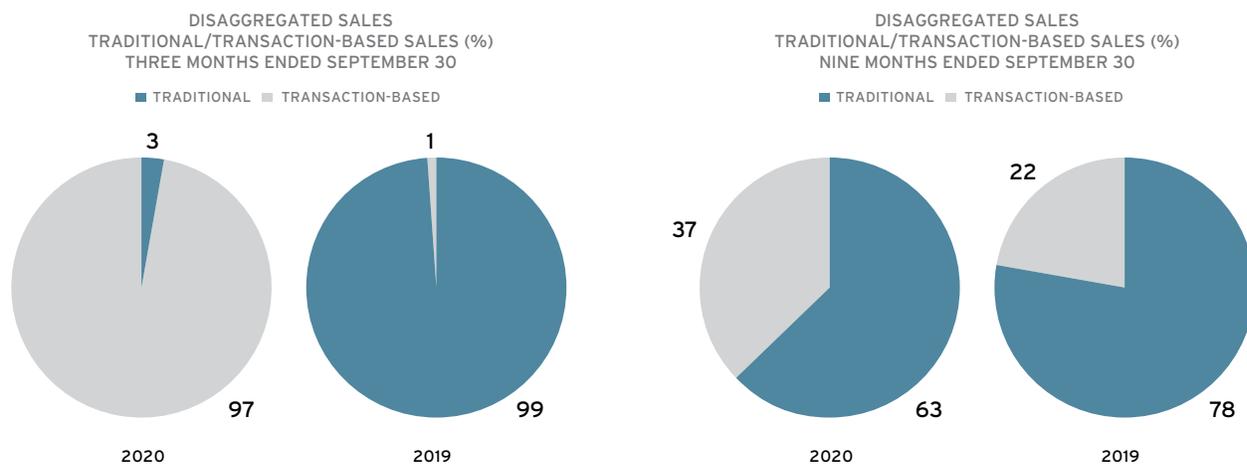
Data library sales were \$1.8 million for the three months ended September 30, 2020 compared to \$2.5 million for the three months ended September 30, 2019.

Data library sales were \$5.9 million for the nine months ended September 30, 2020 compared to \$18.4 million for the nine months ended September 30, 2019.

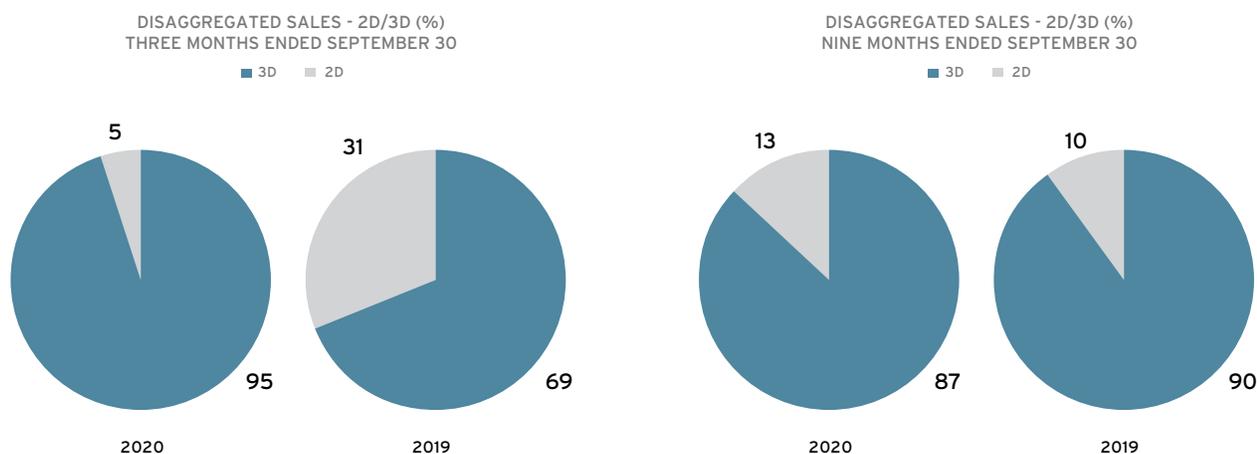
#### DISAGGREGATED DATA LIBRARY SALES BREAKDOWN

Pulse uses three ways to disaggregate its data library sales. The following graphs illustrate the three forms of sales disaggregation for the three- and nine-month periods ended September 30, 2020 and 2019.

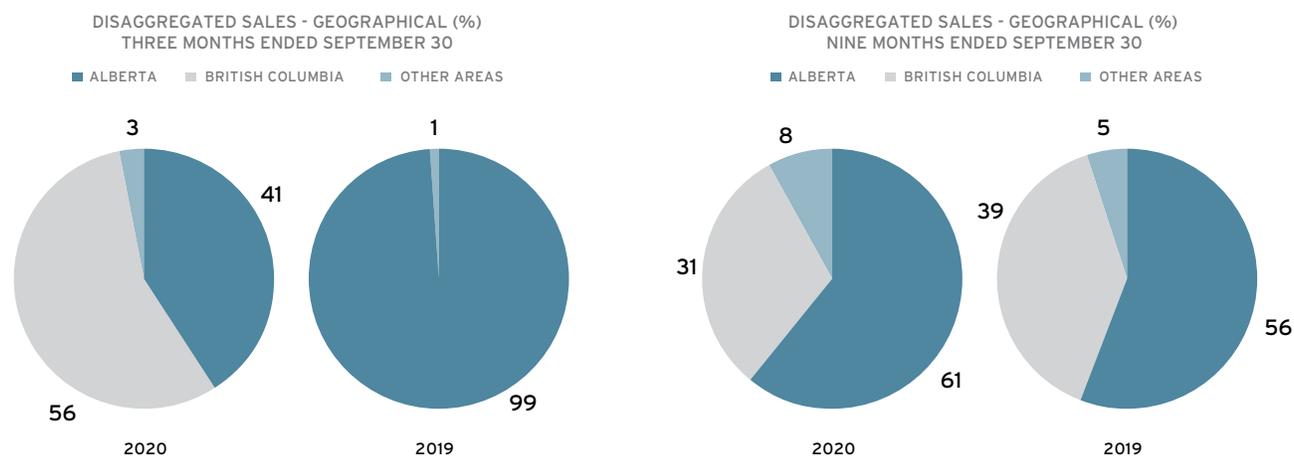
The first breakdown, transaction type, separates sales between traditional and transaction-based sales. These two types fluctuate greatly from period to period and year to year. An eight-year historical breakdown is also provided in the MD&A for the year ended December 31, 2019.



The second breakdown, data type, compares sales of 2D and 3D seismic data. As 3D seismic licence contracts are generally larger than 2D seismic licence contracts, the percentage of seismic data library revenues generated from 2D and 3D seismic data can fluctuate significantly depending on the number of 3D seismic sale contracts signed during a given period.



The third breakdown is geographical. The largest proportion of data sales usually comes from data in Alberta, as that is where the majority of Pulse's data coverage and current industry activity are.



### AMORTIZATION OF SEISMIC DATA LIBRARY

For the three months ended September 30, 2020, seismic data library amortization expense was \$2.5 million compared to \$3.6 million in the comparable period of 2019. For the nine months ended September 30, 2020, seismic data library amortization expense was \$8.9 million compared to \$10.7 million in the comparable period of 2019.

The decrease in the amortization expense is due to certain data acquired in previous years becoming fully amortized.

Amortization of the seismic data library is described further under "Critical Accounting Estimates" in the Company's MD&A for the year ended December 31, 2019.

### IMPAIRMENT

At September 30, 2020, the Company assessed the cash-generating units (CGUs) in its seismic data library for indicators of impairment, as required under IFRS, and concluded there were no new indicators from June 30, 2020 and that, accordingly, no impairment test was required.

At March 31, 2020, the Company assessed the CGUs in its seismic data library for indicators of impairment, as required under IFRS, and concluded there were such indicators. The principal indicator was the significant reduction

in commodity prices along with uncertainty over the timing of any improvement, in conjunction with the COVID-19 pandemic and its impact on the global economy. Those indicators triggered an impairment test on the Seitel data library CGU. For the purpose of impairment testing, the recoverable amount of a Company CGU is the greater of its value-in-use and its fair value less costs to sell. The recoverable amount of the Seitel CGU was determined based on a value-in-use calculation. The Company used the following assumptions for this calculation:

- The estimated future cash flows for the next five years net of variable and fixed costs with a terminal valuation applied. The forecast is based on past performance as well as management's assessment of economic conditions, expected market trends and anticipated activity levels of the Western Canadian oil and natural gas sector;
- The terminal value of the Seitel CGU, estimated to be 40 percent of the 2024 cash flows, with a decline rate of 2 percent;
- An after-tax discount rate of 11 percent to calculate the net present value of future cash flows, which is the weighted average cost of capital calculated at March 31, 2020; and
- A combined federal-provincial income tax rate of 25 percent.

Based on these assumptions and the Company's calculations, no impairment loss was incurred in the first quarter of 2020.

#### **SALARIES, INTERNAL COMMISSIONS AND BENEFITS (SCB)**

SCB for the three months ended September 30, 2020 was \$497,000 compared to \$751,000 in the comparable period of 2019. The decrease from 2019 is explained by salary reductions ranging from 10 percent to 20 percent for the Company's executive and management team implemented in the second quarter of 2020. As stated above, the Company also received \$135,000 from the Canada Emergency Wage Subsidy (CEWS).

SCB for the nine months ended September 30, 2020 was \$1.8 million compared to \$3.5 million in the comparable period of 2019. The significant decrease is due to the acquisition bonus of \$700,000 paid in the first quarter of 2019 to Pulse executives and staff for the completion of the acquisition and integration of Seitel, the decrease in the accounting expense for the employee incentive plans, salary reductions and the CEWS.

#### **OTHER SELLING, GENERAL AND ADMINISTRATIVE COSTS (SG&A)**

SG&A for the three months ended September 30, 2020 was \$150,000 compared to \$457,000 for the three months ended September 30, 2019. In the third quarter of 2020, the \$180,000 allowance for impairment of trade receivables, for one customer, at December 31, 2019 was reversed. On July 20, 2020, the Company received payment in full from this customer.

SG&A for the nine months ended September 30, 2020 was \$946,000 compared to \$1.5 million for the nine months ended September 30, 2019. The decrease is partially due to higher corporate reporting expenses in the first half of 2019 related to the Seitel acquisition, along with a significant review of all expenses in 2020 to reduce costs in light of a low sales environment at the beginning of 2020 and the reversal of the allowance for impairment of trade receivables explained previously. Compensation for the Board of Directors was also reduced. Director's fees for the chair of the Board of Directors were reduced by 50 percent and all other independent director's fees were reduced by 40 percent.

#### **RESTRUCTURING COSTS**

Restructuring costs for the nine months ended September 30, 2020 were \$231,000 compared to \$2.5 million for the nine months ended September 30, 2019. The following expenses were included in 2019: \$1.5 million of severance payments related to the acquired company in January 2019, audit fees related to regulatory reporting of the Seitel acquisition, expenses related to the Seitel warehouse lease, increased marketing costs and minor SG&A expenses related to Seitel integration.

#### **NET FINANCING COSTS**

For the three months ended September 30, 2020, the Company's net financing costs were \$503,000 compared to \$602,000 for the same period in 2019. For the nine months ended September 30, 2020, the Company's net financing

costs were \$1.4 million compared to \$1.9 million for the same period in 2019. The decrease is due to the reduction in the average interest rate and lower long-term debt balance during the first three quarters of 2020. The Company's credit facility is comprised of \$12.8 million in term debt and a \$30.0 million revolving facility, on which \$5.9 million was owing as of September 30, 2020. The total available to draw on the revolving facility was reduced to \$15.0 million for the one-year modification period, as explained in the liquidity section below.

Pulse also has a five-year subordinated debt agreement with Edgepoint Investment Group Inc., a non-arm's-length party, for \$10.0 million. The agreement has no requirement to repay the principal prior to the end of term.

## INCOME TAXES

The income tax recovery for the three months ended September 30, 2020 was \$26,000, reflecting an effective tax rate for accounting of 1.3 percent, compared to an income tax recovery of \$359,000 and an effective tax rate for accounting of 11.1 percent for the comparable 2019 period. The income tax recovery for the nine months ended September 30, 2020 was \$552,000, reflecting an effective tax rate for accounting of 7.2 percent, compared to an income tax expense of \$899,000 and an effective tax rate for accounting of 51.3 percent for the comparable 2019 period. The main factor affecting the tax rate calculation is the permanent difference between the tax basis and the accounting value of the data library acquired in January 2019.

The federal-provincial enacted corporate income tax rate is 25 percent in 2020 and was an average of 26.5 percent in 2019, the change being due to phased reductions to the corporate income tax rate levied by the Province of Alberta.

Subsequent to quarter end, on October 20, 2020, the government of Alberta substantively enacted the reduction of the 2020 corporate income tax rate from 10% to 8% retroactive to July 1, 2020. The average combined income tax rate for 2020 fiscal year will be 24%. The effect of this change on the year-to-date results as of September 30, 2020 would be an income tax recovery increase of \$32,000 which will be reflected in the December 31, 2020 income tax recovery.

## REVIEW OF FINANCIAL POSITION

AS AT SEPTEMBER 30, 2020

### TRADE AND OTHER RECEIVABLES

Trade and other receivables at September 30, 2020 totalled \$4.3 million compared to \$4.2 million at December 31, 2019.

### CURRENT TAX ASSETS

Included in current tax assets is the current tax recovery for the first three quarters of 2020 and the 2020 income tax installments.

### SEISMIC DATA LIBRARY

The Company's business model includes the objective of seismic data library growth. Pulse acquires seismic data to add to its library through two main methods. The Company purchases proprietary rights to complementary seismic datasets when it finds appropriate opportunities, and it also has conducted participation surveys. Pulse partners with customers on participation surveys from which the seismic data collected is added to Pulse's data library to generate future licensing revenue. Pulse retains full ownership of the data, and participating customers are provided with a licensed copy in return for their contribution to the capital costs of the survey. Pulse has not conducted a participation survey since the first quarter of 2015, but has grown significantly during this time through acquisition.

On January 15, 2019 the Company, through its acquisition of Seitel, added approximately 36,354 net square kilometres of 3D data and 379,207 net kilometres of 2D data to its library. The total value allocated to the seismic data in the purchase price was \$61.0 million.

## LONG-TERM RECEIVABLES

In November 2019 the Company closed a \$3.4 million seismic data sale. The sale included extended payment terms and, therefore, the payments due more than one year later were discounted, resulting in \$191,000 of the data library sale to be recognized as interest income over time until the payments are received in 2021 and 2022. The deferred interest income balance at September 30, 2020 was \$106,000.

The \$1.2 million in payments due from January 1, 2021 to September 30, 2021 are included in the trade and other receivables. The remaining balance of \$1.2 million in payments due from January 1, 2022 to October 1, 2022 is presented as a long-term receivable in the statement of financial position.

## RIGHT-OF-USE (ROU) ASSETS

Included in the ROU assets are the present values of the basic rent related to Pulse's office lease agreement and the warehouse lease agreement assumed through the acquisition. The present values are calculated using an incremental borrowing rate of 6.7 percent. The operating costs associated with the lease agreements were not included as those costs are not fixed or based on an index or rate.

The office lease agreement terminates in March 2023 and the warehouse lease agreement terminates in April 2022.

## LONG-TERM DEBT

As described in "Net Financing Costs" above, Pulse partially funded the acquisition of Seitel with a combination of debt from its syndicated credit facility and subordinated debt of \$10.0 million.

The current portion of long-term debt consists of the annual mandatory principal repayment of \$1.5 million (made in quarterly payments of \$375,000) related to the syndicated credit facility.

The non-current portion of the long-term debt is offset by deferred financing charges to be amortized over three years.

## LEASE LIABILITIES

Included in lease liabilities are the present values of the basic rent related to Pulse's office lease agreement, the lease agreement for Seitel's former office space and the warehouse lease agreement, all calculated using an incremental borrowing rate of 6.7 percent. The operating costs included in the lease agreements were not included in the lease liabilities as these costs are not fixed or based on an index or rate.

## OTHER LONG-TERM PAYABLE

Included in the other long-term payable is the long-term portion of the cash-settled liability related to the long-term incentive plan.

## SHARE CAPITAL SUMMARY

The Company's authorized share capital consists of an unlimited number of common shares and an unlimited number of preferred shares, issuable in series.

The following table details the Company's outstanding share capital:

	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Weighted average shares outstanding:				
Basic and diluted	<b>53,793,317</b>	53,793,317	<b>53,793,317</b>	53,793,317
Shares outstanding at period-end and at November 10, 2020			<b>53,793,317</b>	53,793,317

## DILUTED EARNINGS PER SHARE RECONCILIATION

The Company does not have any dilutive securities.

### LONG-TERM INCENTIVE PLAN (LTIP)

The Company has an LTIP for employees, officers and directors designed to align the Company's long-term incentive compensation with its performance and to increase levels of stock ownership. Participants are granted restricted share units (RSUs) and performance share units (PSUs). LTIP awards are at the discretion of the Board of Directors.

On March 31, 2020 186,658 RSUs and 237,113 PSUs were eligible to vest. Corporate financial performance in 2019 did not meet the predetermined performance benchmarks and, consequently, no PSUs vested on March 31, 2020. RSUs vest automatically based upon time and, consequently, all of the eligible RSUs vested on March 31, 2020.

To satisfy its obligation, in April 2020 the Company provided \$106,000 to the plan's trustee to purchase common shares on the open market for the total after-tax number of cash- and equity-settled RSUs that vested on March 31, 2020. The related payroll taxes of \$102,000 were paid in June 2020 to settle fully the accrued cash-settled portion of the share-based payment liabilities.

At September 30, 2020 and November 10, 2020 there were 692,140 RSUs and 876,973 PSUs outstanding.

### DEFICIT

As of September 30, 2020 the Company's deficit increased by \$7.1 million, which was the net loss for the nine-month period ended September 30, 2020.

### DEFERRED TAX LIABILITY

The deferred income tax liability was \$954,000 at September 30, 2020 compared to \$1.1 million at December 31, 2019. The decrease in the deferred income tax liability is mainly due to the decrease in the difference between the tax base of the seismic data library and the carrying amount on the statement of financial position.

The deferred income tax liability consists mainly of taxable temporary differences between the tax base of the seismic data library and the carrying amount on the statement of financial position.

## FINANCIAL SUMMARY OF QUARTERLY RESULT

(thousands of dollars, except per share data)	2020				2019			2018	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	
Data library sales	<b>1,829</b>	1,850	2,190	5,281	2,460	10,617	5,277	4,286	
Other revenue	<b>76</b>	91	90	83	127	167	143	27	
Total revenue	<b>1,905</b>	1,941	2,280	5,364	2,587	10,784	5,420	4,313	
Amortization of seismic data library	<b>2,489</b>	2,850	3,516	3,500	3,557	3,577	3,566	1,811	
Net earnings (loss)	<b>(1,937)</b>	(2,309)	(2,827)	(759)	(2,861)	2,880	(2,671)	1,024	
Per share – basic and diluted	<b>(0.04)</b>	(0.04)	(0.05)	(0.01)	(0.05)	0.05	(0.05)	0.02	

The revenue streams generated by Pulse's operations are data library sales and other revenue. Other revenue includes revenue from client services consisting of copy and reproduction charges, as well as data storage fees related to the leased warehouse that was acquired with the Seitel purchase.

Data library sales consist of traditional sales and transaction-based sales, as described under "Traditional Sales vs. Transaction-based Sales: Eight-Year History" in the Company's MD&A for the year ended December 31, 2019. See also "Seismic Revenue Fluctuations".

During 2020, 2019 and 2018, transaction-based sales contributed to data library sales to varying degrees. The second quarter of 2019 included \$4.0 million in transaction-based sales. The third quarter of 2020 included \$1.8 million in transaction-based sales.

Very little transaction-based sales revenue was generated in the other quarters depicted in the table above.

The significant increase in amortization expense in the first quarter of 2019 over the preceding three quarters is due to the Seitel acquisition in January 2019. Amortization expense had decreased in the second quarter of 2018 from the prior quarters depicted above due to a large seismic data library asset acquired in 2010 becoming completely amortized. As amortization is a non-cash expense, the Company continued to generate cash EBITDA and shareholder free cash flow in each quarter.

During the past eight quarters, the fluctuations in net earnings or loss have largely been a function of the corresponding quarterly fluctuations in revenue.

Increases in data library sales have a highly positive impact on earnings, as the operating costs associated with licensing seismic data from the library fluctuate very little from period to period.

All financial data included in the table above is presented in Canadian dollars, the Company's functional currency.

## CONTRACTUAL OBLIGATIONS

Pulse's known contractual obligations at September 30, 2020 are comprised of lease liabilities for office and warehouse space, minimum payments under seismic data services contracts and accounts payable and accrued liabilities. The following table reflects the Company's anticipated payment of contractual obligations:

(thousands of dollars)	Total	Payments due by period			
		Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Long-term debt – principal	28,650	1,500	17,150	10,000	–
Long-term debt – interest	4,522	1,970	2,260	292	–
Lease liabilities	2,609	1,279	1,330	–	–
Seismic data services contracts	627	531	96	–	–
Accounts payable and accrued liabilities	894	846	48	–	–
<b>Total contractual obligations</b>	<b>37,302</b>	<b>6,126</b>	<b>20,884</b>	<b>10,292</b>	<b>–</b>

Obligations in the category of seismic data services contracts include data storage and the data digitization project.

## LIQUIDITY, CAPITAL RESOURCES AND CAPITAL REQUIREMENTS

At September 30, 2020 Pulse had working capital of \$2.0 million and a working capital ratio of 1.6:1.

In the first three quarters of 2020 the Company generated \$3.1 million of cash from operating activities compared to \$7.5 million for the same period in 2019. The main differences between the two periods relate to lower net financing costs and the collection of accounts receivable in the first three quarters of 2020, offset by lower sales and the income tax installments paid in the first quarter for 2020.

The Company also utilized cash for the following outlays:

- Long-term debt repayments of \$3.1 million;
- Settlement of equity share-based payment of \$106,000;
- Debt transaction costs of \$88,000;
- Capital lease principal repayments of \$523,000; and
- Seismic data digitization of \$287,000.

The cash balance at September 30, 2020 was \$282,000.

In June 2020, the Company amended its syndicated credit facility to provide additional flexibility for the coming quarters. The four-quarter period for which these amendments are related is referred to as the modification period. The Company's syndicated credit facility now comprises \$12.8 million in term debt and \$15.0 million of availability on the \$30.0 million revolving facility, both of which were utilized for the acquisition of Seitel in January 2019. The revolving facility has been reduced for the duration of the modification period. The Company paid an amendment fee of \$88,000 in June 2020 for the modifications to its credit facility. Up to \$5.0 million of the revolving facility remains available as an operating line of credit. The facility specifies repayment terms, interest rates and financial covenants that are described below.

Significant terms of the credit facility are:

- Interest on the term debt and the revolving facility is based on prime rate plus 0.75 percent to 4.25 percent (previously plus 0.25 percent to 2.75 percent), following a ten-tier margin structure (previously eight-tier) based on the Company's total debt to adjusted EBITDA ratio as described below;
- An accordion feature allowing the Company to increase the facility's size by up to an additional \$25.0 million, subject to the lenders' consent. The accordion will not be available during the modification period;
- \$375,000 aggregate quarterly principal payments on the term debt and the facility, with voluntary prepayments permitted in whole or part at any time, without premium or penalty. This is unchanged from the original agreement;
- Three-year term until January 22, 2022 on the syndicated credit facility, with an extension of up to one year available on January 15 of every year with the approval of the lenders. If the extension is not granted, any outstanding amounts will be payable on the then-current applicable maturity date. Pulse did not request an extension on January 15, 2020;
- Standby fee based on the daily undrawn balance of the revolving portion of the credit facility and the Company's total debt to adjusted EBITDA ratio following the amended ten-tier margin structure; and
- Security through a charge on all of the assets of the Company and its material subsidiaries.

At September 30, 2020 the Company had a \$5.9 million balance on the revolving credit facility. With the reduction to the amount available through the modification period, which began on July 1, 2020, \$9.1 million remained available for future draws. When the modification period ends on September 30, 2021, the full amount of the revolving facility, \$30.0 million, is expected again to be available to the Company. At September 30, 2020 the applicable interest rate on the long-term debt was 5.2 percent (September 30, 2019 - 4.7 percent).

The credit facility also includes the following financial covenants:

#### 1) MAXIMUM SENIOR DEBT TO ADJUSTED EBITDA RATIO

The senior debt to adjusted EBITDA ratio was unchanged for the first and second quarters of 2020 and could not be greater than 3.5:1 on March 31, 2020 and 3.25:1 on June 30, 2020. During the four-quarter modification period, the maximum ratio shall increase in steps to 4.25:1 (previously 3.25:1) for September 30, 2020, 5.5:1 (previously 3.0:1) for December 31, 2020 and March 31, 2021 and then decrease in steps to 4.25:1 (previously 3.0:1) for June 30, 2021, following which it is to remain unchanged at 3:1 for fiscal quarters ending September 30, 2021 and thereafter.

Senior debt is total debt less subordinated debt and is determined on a consolidated basis and in accordance with IFRS.

Adjusted EBITDA is to be calculated on a trailing 12-month basis and is defined as earnings or loss before interest, income taxes, depreciation and amortization, plus extraordinary losses, non-cash losses and expense charges, and any other unusual or non-recurring cash charges, expenses or losses consented to by the lenders, less participation survey revenue, lease payments treated as capital lease, warehouse storage fees, extraordinary gains and non-cash gains and income. Adjusted EBITDA is to be adjusted for acquisitions or dispositions to reflect such acquisition or disposition as if it occurred on the first day of such calculation period.

## 2) MINIMUM INTEREST COVERAGE RATIO

The minimum interest coverage ratio, defined as the ratio of adjusted EBITDA to interest expense, shall not be less than 3:1.

On any date upon which the senior debt to adjusted EBITDA ratio has been equal to or higher than 2:1 for two consecutive quarters, the fixed charge coverage ratio replaces the interest coverage ratio.

The fixed charge coverage ratio is equal to adjusted EBITDA less unfunded capital expenditures, cash taxes and permitted cash distributions divided by the sum of scheduled principal repayments and interest expense paid in cash, and previously was 1.2:1 for each period including the period ended June 30, 2020. This changes during the modification period and shall not be less than 1.15:1 for September 30, 2020, 1.05:1 for December 31, 2020 and March 31, 2021 and then increases to 1.15:1 for June 30, 2021 and 1.20:1 for fiscal quarters ending September 30, 2021 and thereafter.

At September 30, 2020 the senior debt to adjusted EBITDA ratio was 2.60:1 and the fixed charge coverage ratio was 2.08:1.

The Company was therefore in compliance with the credit facility's covenants at September 30, 2020.

The Company pays interest and a standby fee based on the daily undrawn balance of the credit facility and its total debt to adjusted EBITDA ratio. Interest and the standby fee on the syndicated revolving bank loan are calculated based on the syndicate lead lender's prime rate, bankers' acceptance rate or LIBOR, plus an applicable margin based on the covenant ratio of total debt to adjusted EBITDA. The total debt to adjusted EBITDA ratio at September 30, 2020 was 4.00:1 and the applicable margin and standby fee remained at level 7 of the 10 rates specified under the facility.

The interest and standby fee rates are adjusted two business days after the covenant's calculation for the previous fiscal quarter is received and approved by the lenders.

The applicable margin and standby fee rate are determined as follows:

Total debt to adjusted EBITDA ratio	Applicable margin for Canadian prime rate loans	Applicable margin for bankers' acceptances	Standby fee rate
Less than or equal to 1:1	0.75%	2.25%	0.45000%
Greater than 1:1 but less than or equal to 1.5:1	1.00%	2.50%	0.50000%
Greater than 1.5:1 but less than or equal to 2:1	1.25%	2.75%	0.55000%
Greater than 2:1 but less than or equal to 2.5:1	1.50%	3.00%	0.67500%
Greater than 2.5:1 but less than or equal to 3:1	1.75%	3.25%	0.73125%
Greater than 3:1 but less than or equal to 3.5:1	2.25%	3.75%	0.93750%
Greater than 3.5:1 but less than or equal to 4:1	2.75%	4.25%	1.06250%
Greater than 4:1 but less than or equal to 4.5:1	3.25%	4.75%	1.18750%
Greater than 4.5:1 but less than or equal to 5:1	3.75%	5.25%	1.31250%
Greater than 5:1	4.25%	5.75%	1.43750%

Funding for Pulse's future capital expenditures will generally depend on the level of future data library sales. Pulse's management believes that the Company's capital resources will be sufficient to finance future operations and carry out the necessary capital expenditures through 2020. The Company anticipates that future capital expenditures will be financed through cash on hand, available credit facilities, and funds from operations. If deemed appropriate by management and the Board of Directors, Pulse can also issue common or preferred shares.

Pulse requires flexibility in managing its capital structure to take advantage of opportunities in raising additional capital where opportunities for seismic data acquisitions arise. Historically, the Company has used a combination of debt and equity to finance growth initiatives, and it continues to rely on internal measures such as the long-term debt to equity ratio, to structure and forecast its capital requirements. Long-term debt is defined as long-term debt, net of deferred financing costs. At September 30, 2020, the long-term debt to equity ratio was 1.14:1. Pulse's management considers the current capital structure appropriate.

This discussion on liquidity, capital resources and capital requirements contains forward-looking information; users of this information are cautioned that actual results may vary and are encouraged to review the discussions of risk factors and forward-looking statements below.

## NON-CAPITAL RESOURCES

The Company's main non-capital resource is its key management and staff. The Company has an experienced team with extensive knowledge about the seismic industry. Pulse's management understands industry cycles and how to manage the business in the downturn and recovery phases. Pulse has built strong sales, financial and information technology departments. Key management and staff are eligible to participate in the short-term and long-term incentive plans, which are tied to the Company's shareholder free cash flow per share.

## NON-GAAP FINANCIAL MEASURES AND RECONCILIATIONS

This MD&A and the Company's continuous disclosure documents provide discussion and analysis of cash EBITDA and shareholder free cash flow. IFRS do not include standard definitions for these measures and, therefore, they may not be comparable to similar measures used and disclosed by other companies. The Company has included these non-GAAP financial measures because management, investors, analysts and others use them to evaluate the Company's financial performance.

Cash EBITDA and shareholder free cash flow are not calculations set forth in IFRS and should not be considered in isolation or as a substitute for IFRS performance measures, nor should they be used as an exclusive measure of cash flow, because they do not consider working capital changes, capital expenditures, long-term debt repayments and other sources and uses of cash which are disclosed in the consolidated audited and interim statements of cash flows.

### CASH EBITDA AND SHAREHOLDER FREE CASH FLOW

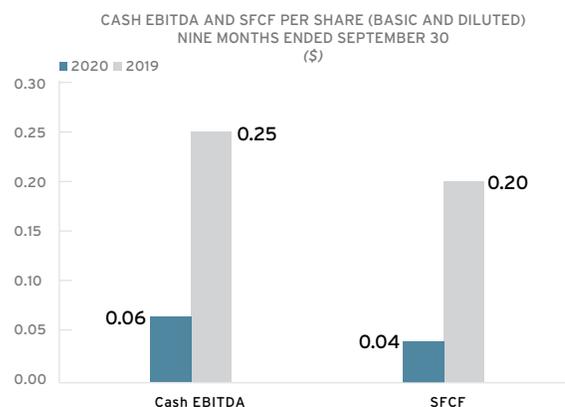
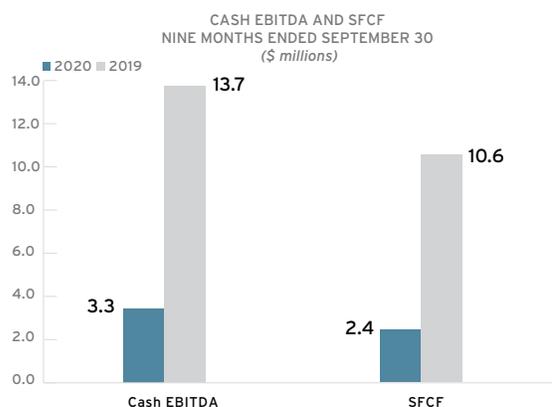
Cash EBITDA represents the capital available to invest in growing the Company's 2D and 3D seismic data library, to pay interest and principal on its long-term debt, to purchase its common shares, to pay income taxes and to pay dividends.

Cash EBITDA is calculated as earnings or loss from operations before interest, taxes, depreciation and amortization less participation survey revenue, lease payments treated as capital lease and warehouse storage fees, plus non-cash and non-recurring expenses. Cash EBITDA excludes participation survey revenue as this revenue is directly used to fund specific participation surveys and is unavailable for discretionary expenditures. The Company believes cash EBITDA helps investors compare Pulse's results on a consistent basis without regard to participation survey revenue and non-cash items, such as depreciation and amortization, which can vary significantly depending on accounting methods or non-operating factors such as historical cost.

Shareholder free cash flow further refines the calculation of capital available to invest in growing the Company's 2D and 3D seismic data library, to repay debt, to purchase its common shares and to pay dividends, by deducting non-discretionary expenditures from cash EBITDA. Non-discretionary expenditures are defined as debt financing costs (net of deferred financing expenses amortized in the current period) and current tax provisions.

A reconciliation of net earnings or loss to EBITDA, cash EBITDA and shareholder free cash flow follows:

(thousands of dollars, except per share data)	Three months ended September 30,		Nine months ended September 30,	
	2020	2019	2020	2019
Net loss	<b>(1,937)</b>	(2,861)	<b>(7,073)</b>	(2,652)
Add:				
Amortization of seismic data library	<b>2,489</b>	3,557	<b>8,855</b>	10,700
Net financing costs	<b>503</b>	602	<b>1,419</b>	1,926
Income tax expenses (recovery)	<b>(26)</b>	(359)	<b>(552)</b>	899
Depreciation	<b>166</b>	165	<b>501</b>	480
EBITDA	<b>1,195</b>	1,104	<b>3,150</b>	11,353
Deduct:				
Lease payments treated as capital lease	<b>21</b>	21	<b>64</b>	64
Warehouse storage fees	<b>75</b>	96	<b>225</b>	350
Add:				
Non-cash expenses	<b>60</b>	63	<b>198</b>	221
Restructuring costs	<b>63</b>	275	<b>231</b>	2,518
Cash EBITDA	<b>1,222</b>	1,325	<b>3,290</b>	13,678
Deduct:				
Net financing costs	<b>503</b>	602	<b>1,419</b>	1,926
Current income tax expense	<b>-</b>	-	<b>-</b>	1,335
Add:				
Non-cash deferred financing charges	<b>55</b>	32	<b>119</b>	91
Current income tax recovery	<b>60</b>	279	<b>316</b>	-
Interest paid (capital lease)	<b>27</b>	38	<b>89</b>	116
Shareholder free cash flow (SFCF)	<b>861</b>	1,072	<b>2,395</b>	10,624
Cash EBITDA per share – basic and diluted	<b>0.02</b>	0.02	<b>0.06</b>	0.25
SFCF per share – basic and diluted	<b>0.02</b>	0.02	<b>0.04</b>	0.20



As reported in previous filings concerning the Seitel acquisition, in addition to the purchase price of \$58.6 million, Pulse assumed various future liabilities that are viewed by the Company as being a part of the total cost of the acquisition. These estimated \$4.2 million of costs are being expensed over time and categorized as restructuring costs, with a large percentage occurring in 2019, including \$1.9 million in the first quarter of 2019. Because these expenses are expected to be non-recurring, they are excluded from the Company's calculation of cash EBITDA and shareholder free cash flow. Also deducted from the cash EBITDA calculation is the storage fee received for the use of a portion of the warehouse by a third party.

## FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments are recognized on the statement of financial position when the Company becomes a party to the instrument's contractual obligations. The Company's financial assets include cash and cash equivalents, trade and other receivables. Its financial liabilities mainly comprise accounts payable and long-term debt.

### FAIR VALUE

The fair values of cash and cash equivalents, accounts receivable and accounts payable approximate their carrying amount largely due to the short-term maturities of these instruments. The fair value of the long-term debt approximates the carrying value because interest charges under the bank loan are based on current Canadian bankers' acceptance rates and margins.

### CREDIT RISK

There have been no significant changes in Pulse's credit risk as disclosed in the Company's MD&A for the year ended December 31, 2019.

At September 30, 2020, 96 percent of the total accounts receivable were due from three customers who benefit from payment terms. A payment from one customer was received in October. One payment of \$2.1 million is due from another customer in January 2021. The payments from the third customer are due from January 1, 2021 to September 1, 2022. The payments are expected to be collected as per the related payment schedules.

### LIQUIDITY RISK

There have been no significant changes in Pulse's liquidity risk as disclosed in the Company's MD&A for the year ended December 31, 2019.

### COMMODITY PRICE RISK

A change in commodity prices, specifically oil and natural gas prices, has a material impact on the Company's customers' cash flows and could therefore affect seismic data library sales. Commodity prices are affected by many factors, including supply and demand. The Company has not entered into any commodity price risk contracts. The financial impact on the Company of changing oil and natural gas prices is not reasonably determinable.

## NEW IFRS STANDARDS

A number of new standards, amendments to standards and interpretations have been issued by the International Accounting Standards Board (IASB) but were not yet effective for the period ending September 30, 2020. Accordingly, they were not applied in preparing the condensed consolidated interim financial statements. None is expected to have a significant effect on the consolidated financial statements.

## CRITICAL ACCOUNTING ESTIMATES

There have been no significant changes in Pulse's critical accounting estimates as disclosed in the Company's MD&A for the year ended December 31, 2019.

## DISCLOSURE CONTROLS AND PROCEDURES (DC&P) AND INTERNAL CONTROLS OVER FINANCIAL REPORTING (ICFR)

The Company applies the COSO Internal Control – Integrated Framework (2013 Framework). There were no changes in the ICFR that occurred during the period beginning on July 1, 2020 and ending on September 30, 2020 that materially affected, or are reasonably likely to materially affect, the Company's ICFR. No material weaknesses relating to the design of the ICFR were identified. As well, there were no limitations on the scope of the design of the DC&P or the ICFR.

## RISK FACTORS

There have been significant changes in Pulse's risk factors as described in the Company's MD&A for the year ended December 31, 2019. Changes are discussed in "COVID-19 Impact on the Company's Operations and Risks".

## ADDITIONAL INFORMATION

You may find additional information relating to Pulse, including the Company's Annual Information Form, on SEDAR at [www.sedar.com](http://www.sedar.com).

## FORWARD-LOOKING INFORMATION

This document contains information that constitutes "forward-looking information" or "forward-looking statements" (collectively, "forward-looking information") within the meaning of applicable securities legislation. Forward-looking information is often, but not always, identified by the use of words such as "anticipate", "believe", "expect", "plan", "intend", "forecast", "target", "project", "guidance", "may", "will", "should", "could", "estimate", "predict" or similar words suggesting future outcomes or language suggesting an outlook.

This MD&A and, specifically, the Outlook and the Liquidity, Capital Resources and Capital Requirements sections herein contain forward-looking information which includes, but is not limited to, statements regarding:

- The outlook of the Company for the year ahead, including future operating costs and expected revenues;
- Recent events on the political, economic, regulatory, public health and legal fronts affecting the industry's medium- to longer-term prospects;
- The Company's capital resources and sufficiency thereof to finance future operations, meet its obligations associated with financial liabilities and carry out the necessary capital expenditures through the balance of 2020;
- Pulse's capital allocation strategy;
- Oil and natural gas prices and forecast trends;
- Oil and natural gas company capital budgets;
- Future demand for seismic data;
- Future seismic data sales;
- Pulse's business and growth strategy; and
- Other expectations, beliefs, plans, goals, objectives, assumptions, information and statements about possible future events, conditions, results and performance, as they relate to the Company or to the oil and natural gas industry as a whole.

Sources for the forecasts and the material assumptions underlying this forward-looking information are, where applicable, noted in the relevant sections of this MD&A.

By its very nature, forward-looking information involves inherent risks and uncertainties, both general and specific, and risks that predictions, forecasts, projections and other forward-looking statements will not be achieved. Pulse does not publish specific financial goals or otherwise provide guidance, due to the inherently poor visibility of seismic revenue.

The Company cautions readers not to place undue reliance on these statements as a number of important factors could cause the actual results to differ materially from the beliefs, plans, objectives, expectations, estimates and intentions expressed in such forward-looking information. These factors include, but are not limited to:

- Uncertainty of the timing and volume of data sales from the newly acquired seismic data library, which was partially funded with long-term debt;
- Volatility of oil and natural gas prices;
- Risks associated with the oil and natural gas industry in general;
- The Company's ability to access external sources of debt and equity capital;
- Credit, liquidity and commodity price risks;
- The demand for seismic data and participation surveys;
- The pricing of data library licence sales;
- Cybersecurity;
- Relicensing (change-of-control) fees and partner copy sales;
- The level of pre-funding of participation surveys, and the Company's ability to make subsequent data library sales from such participation surveys;
- The Company's ability to complete participation surveys on time and within budget;
- Environmental, health and safety risks, including those related to the COVID-19 pandemic;
- Federal and provincial government laws and regulations, including those pertaining to taxation, royalty rates, environmental protection, public health and safety;
- Competition;
- Dependence on qualified seismic field contractors;
- Dependence on key management, operations and marketing personnel;
- The loss of seismic data;
- Protection of intellectual property rights;
- The introduction of new products; and
- Climate change.

Pulse cautions that the foregoing list of factors that may affect future results is not exhaustive. Additional information on these risks and other factors which could affect the Company's operations and financial results is included under "Risk Factors" herein, under "Risk Factors" in the Company's most recent annual information form, and in the Company's most recent audited annual financial statements, management information circular, quarterly reports, material change reports and news releases. Copies of the Company's public filings are available on SEDAR at [www.sedar.com](http://www.sedar.com).

When relying on forward-looking information to make decisions with respect to Pulse, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Furthermore, the forward-looking information in this MD&A is provided as of the date of this MD&A and the Company does not undertake any obligation to update publicly or to revise any of the included forward-looking information, except as required by law. The forward-looking information in this document is provided for the limited purpose of enabling current and potential investors to evaluate an investment in Pulse. Readers are cautioned that such forward-looking information may not be appropriate, and should not be used, for other purposes.

# CORPORATE INFORMATION

Pulse is a market leader in the acquisition, marketing and licensing of 2D and 3D seismic data to the western Canadian energy sector. Pulse owns the largest licensable seismic data library in Canada, currently consisting of approximately 65,310 net square kilometres of 3D seismic and 829,207 net kilometres of 2D seismic. The library extensively covers the Western Canada Sedimentary Basin where most of Canada's oil and natural gas exploration and development occur.

## OFFICERS

### **Neal Coleman**

President and CEO

### **Pamela Wicks**

Vice President Finance and CFO

### **Trevor Meier**

Vice President, Sales and Marketing

### **Catherine Samuel**

Corporate Secretary

## BOARD OF DIRECTORS

### **Robert Robottj**<sup>(1) (2) (3)</sup>

Chair

### **Karen El-Tawil**<sup>(2) (4)</sup>

Director

### **Paul Crilly**<sup>(1) (3)</sup>

Director

### **Dallas Droppo**<sup>(1) (2) (3)</sup>

Director

### **Grant Grimsrud**<sup>(2) (4)</sup>

Director

### **Neal Coleman**<sup>(4)</sup>

Director

(1) Member of the Audit and Risk Committee

(2) Member of the Compensation Committee

(3) Member of the Corporate Governance and Nominating Committee

(4) Member of the Environment, Health and Safety Committee

## BANKERS

The Toronto-Dominion Bank

Calgary, Alberta

Alberta Treasury Branches

Calgary, Alberta

## REGISTRAR AND TRANSFER AGENT

Computershare Trust

Company of Canada

Calgary, Alberta

## SOLICITORS

McCarthy Tétraut LLP

Calgary, Alberta

## AUDITORS

KPMG LLP

Calgary, Alberta

## STOCK EXCHANGE LISTING

TSX: PSD

OTCQX: PLSDF

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